

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A process for laser machining of coated sheets, in which at least one topographic change projecting from the surface is produced on at least one side of at least one sheet metal by means of the laser, comprising:

directing a laser beam to carry out a movement through and/or about the center of a processing surface on the sheet metal with transverse and longitudinal components, in such a manner, that the topographic change exhibits a generally spherical peak with a radius that is greater than the height of the topographic change, wherein the height is measured from the deepest recess of the sheet at the foot of the topographic change to its tip,

bringing at least one additional sheet into contact with the at least one coated sheet in such a manner that the at least one projecting topographic change brings about the formation of a gap between the at least two sheets, and

welding the at least two sheets to each other in the area of the at least one gap, in such a manner, that vaporization products occurring during welding can escape through the at least one gap.

2. (previously presented) The process according to claim 1, wherein the sheet metal is a high strength steel.

3. (previously presented) The process according to claim 1, wherein the laser beam is controlled discontinuously with regard to its power and/or speed profile.

4. (previously presented) The process according to claim 1, wherein the laser beam is not focused on the surface.

5. (previously presented) The process according to claim 1, wherein the laser beam describes, during its movement, an ellipse, rosette or fermat figure.

6. (canceled).

7. (currently amended) The process according to claim 1 [[6]], wherein the at least two sheets are welded together in such a manner, that the resulting weld seam at least partially replaces the previously produced at least one topographic change.

8. (canceled).

9. (currently amended) The process ~~coated sheet~~ according to claim 1 [[8]], wherein the peak radius and height of the topographic change exhibit a ratio of at least 2:1.

10. (canceled).

11. (currently amended) A process for laser machining of coated sheets, comprising:

- producing at least one topographic change projecting from a surface of the sheet on at least one side of at least one sheet metal by means of the laser,
- wherein the laser beam produces the at least one topographic change by carrying out a movement through and/or about the center of the processing surface with transverse and longitudinal components, in such a manner, that the topographic change exhibits a generally spherical peak with a radius that is greater than the height of the topographic change, wherein the height is measured from the deepest recess of the sheet at the foot of the topographic change to its tip
- bringing at least one additional sheet into contact with the at least one coated sheet in such a manner that the at least one projecting topographic change brings about the formation of a gap between the at least two sheets, and

- welding the at least two sheets to each other in the area of the at least one gap, in such a manner, that vaporization products occurring during welding can escape through the at least one gap.

12. (previously presented) The process according to claim 11, wherein the sheet metal is a high strength steel.

13. (previously presented) The process according to claim 11, wherein the laser beam is controlled discontinuously with regard to its power and/or speed profile.

14. (previously presented) The process according claim 11, wherein the laser beam is not focused on the surface.

15. (previously presented) The process according to claim 11, wherein the laser beam describes during its movement an ellipse, rosette or fermat figure.

16. (canceled).

17. (currently amended) A process according to claim 11 ~~[[16]]~~, wherein at least two sheets are welded together in such a manner, that the resulting weld seam at least partially replaces the previously produced at least one topographic change.